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EPIDEMIOLOGY

No. 235



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WORLDWIDE REPORT

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DIPHTHERIA CASES NOT CONSIDERED EPIDEMIC

Five Cases in Zavaleta Quarter

Buenos Aires LA NACION in Spanish 7 May 81 p 20

[Text] The municipal secretariat of public health has carried out a campaign of immunization against diphtheria in the Zavaleta quarter among the students attending a school in the area because of the five cases of the disease reported in a family living in the neighborhood.

The children affected are students at this school and are being treated at the Muniz hospital. They are doing well and the prognosis is good.

According to a statement made by the community body, the disease can only be explained by a lack of vaccine or improper vaccination, since if properly administered vaccination provides immunity for 10 years. Also, a survey of family contacts, a medical examination of the families of the patients and their immunization, as well as general immunization, covering 1,062 persons, including 792 children and 265 adults, have been carried out in the Zavaleta quarter.

Characteristics

The statement stressed that it is necessary to appeal to parents to take responsibility for safeguarding the health of their children by vaccinating them. In this connection, it was noted that infants and children of preschool age are given the triple vaccine (against diphtheria, tetanus and whooping cough) free in the municipal hospitals for intensive treatment, at the Ricardo Gutierrez and Pedro de Elizalde pediatric hospitals, at the Muniz and Turnu hospitals for infectious and contagious diseases, and at the Sarda maternity clinic. A double vaccine (against tetanus and diphtheria) is given school children and adults at those same sites.

Diphtheria, a very contagious infectious disease affecting the tonsils, pharynx, larynx or nose, is characterized by the formation of whitish pseudomembranes and a toxic situation which can lead to serious complications. Its incidence is highest in autumn, winter and early spring. It strikes mainly children under 15 who have not been immunized.

Isolated Cases

In response to questions, reliable sources at the public health secretariat stress that these isolated cases in no way reflect epidemic characteristics. "We have only

insisted on public knowledge of them," they commented, "in order to instill in parents who have not had their children immunized a full sense of responsibility and a realization that this is an inexcusable evidence of failure to fulfill the basic duties of parenthood." They also emphasized the excellence and efficiency of the vaccine, and they stated that the response of the population in connection with vaccinating children "has always been positive and exemplary, but precisely because situations such as the present one exist, although isolated and of no overwhelming importance, the municipality has given full publicity to the incident."

Four Cases in Mar del Plata

Buenos Aires LA NACION in Spanish 17 May 81 p 20

[Text] Mar del Plata (TELAM)--It has been learned here that late last Thursday, another child was admitted to the Specialized Maternal and Infant Hospital in this district suffering from diphtheria, bringing the number of reported cases to four. One, as has already been reported, was fatal.

It is reported that more than 15 children are under "contact study" to establish if they are carriers of the bacillus. Moreover, in the eighth health zone, a meeting of representatives of various levels in the health sector will be held, probably tomorrow, it has been announced, "to consider various routine matters and also the matter of the cases of diphtheria reported."

However, responsible spokesmen have acknowledged the possibility that the diphtheria matter was discussed yesterday at a meeting in which the coordinator of the eighth health zone, Dr Raul Pujol, the hospital directors from Mar del Plata, the supervisor at the Institute of Epidemiology, Dr Luis de la Torre, and community health officials participated.

It was reiterated that "these are isolated cases which in no way represent an epidemic outbreak," despite which the development of events will be watched carefully, and the views already expressed concerning "the need to carry out the free vaccination program, which is the only safeguard against the disease," were reiterated.

Hospital Director

"A report of four separate cases of diphtheria happens every year, and the public has become alarmed about an inevitable development."

Dr Carlos Actis, director of the Specialized Maternal-Infant Hospital, made this statement to journalists. He also confirmed that this is not an epidemic, "since a pathology rate of more than 0.6 per 1,000 of the population would be needed for it to be regarded as an epidemic, which in a city such as ours means that there would have to be 30 cases at a minimum."

Speaking of the three children hospitalized who are undergoing treatment based on serum and penicillin to attack the toxins and the bacillus, he explained that they are currently "receiving very intensive treatment and are coming along well."

"Without vaccinating the healthy carriers of the bacillus, they can transmit it to their unvaccinated contacts as well, as occurred in Maipu some years ago, when the

bacillus was discovered in pots of milk custard which had been contaminated by one of these carriers. As has been said, the family and the school are mainly responsible for the vigilance which the inoculation plans or programs require--the whole secret lies there."

Institute Supervisor

The supervisor at the Dr Juan H. Jara National Institute of Epidemiology, Dr Luis de la Torre, has confirmed that several children are under observation in various departments of the Specialized Maternal-Infant Hospital in this district, all of them showing a complex of symptoms "possibly indicating diphtheria."

Dr de la Torre said that "at the institute, the children will undergo 'contact studies' involving the environment surrounding the child who died several days ago. There will be a direct and very thorough examination of the membrane covering the throat, for the purpose of establishing the various reactions." The head of the insititute believes that "the results of these tests will be available by next Saturday or Sunday." Also, he said that the population should not be worried, particularly those individuals whose children have been vaccinated, since no problem exists for them.

De la Torre urged the people and "mainly those parents who have not yet vaccinated their children to do so as soon as possible in order to be sure that they will not contract the disease."

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CSO: 5300/2130

OFFICIAL EXPLAINS HEPATITIS OUTBREAK

Buenos Aires LA NACION in Spanish 16 May 81 p 5

[Text] "The current situation should be viewed as an increase in the number of cases which does not exceed the epidemiological safety limit and therefore cannot be defined as an outbreak or epidemic." This was the statement made by the municipal director of health protection and advancement, Dr Felix Olivieri, in response to questions from LA NACION about an increase in the number of hepatitis cases reported recently in this part of the city of Buenos Aires. Also, and in connection with a recent report from the communal public health secretariat, indicating an increase from 1976 to the present year with the clearest peaks in 1979, he stressed that if indeed it is true that the increase is a real one in the capital area, it has been due first of all to the ready spread of the disease and the lack of specific immunization. Secondly, he said that new epidemiological survey methods have made it possible to identify a larger number of patients, and lastly, the transfer of the primary schools to the municipal jurisdiction led to an increase in disease reports, since now there is direct and permanent reporting of the cases occurring in these institutions.

Why So Much Hepatitis?

Dr Olivieri explained that three epidemiological variables must be taken into account in the spread of the disease: a) host; b) agent; c) environment. Where the host is concerned, the possibility of contagion exists during the final portion of the incubation period, during the course of the clinically diagnosable disease, and during convalescence, such that the host must be regarded as a carrier for 35 or 40 days. He added that there is the problem of the so-called "healthy carriers," who have no visible manifestations of hepatitis, as well as convalescent carriers, presumably cured, who further spread the disease.

Among the causal agents, virus A, responsible for infectious hepatitis, B, responsible for serum hepatitis, and virus forms which are neither A nor B and are responsible for other types of hepatitis which are not clearly differentiated. With hepatitis A, he went on, "the virus remains for a certain time, above all in the patient's fecal matter. The transmission mechanism involves the ingestion of food or water, liquid or solid, which has been contaminated, or the transmission and dissemination of the virus by a patient with unclean hands. Hepatitis B is passed on basically when the blood of a patient or carrier finds its way into the bloodstream of a healthy person by means of transfusions or injections using contaminated needles or syringes."

Symptoms of the Disease

It should be noted that the various forms of viral hepatitis seen are from a clinical point of view very similar. The predominant symptoms are jaundice (yellowish tint to the skin and mucous membranes, above all the conjunctiva of the eyes) and the passing of urine of a sharp dark color. The clinical picture for the patient is supplemented by general malaise accompanied by nausea, lack of appetite and vomiting. However, there are mild clinical forms even without jaundice, which can only be identified through laboratory analysis. On the subject of the steps to be taken concerning hepatitis, Dr Olivieri said that when a case or cases is reported, professional workers from the school health division or the epidemiological vigilance department visit the site and order the hygiene, isolation, environmental health and health education measures necessary to prevent the spread of the disease. Another of the aspects paralleling the dynamic mechanisms put into motion involves the information provided by the municipality to the people repeatedly, through reports and statements in the press and on the radio and television.

"Where the environment is concerned, an insufficiently hygienic situation linked with an inadequate supply of drinking water and the unhygienic handling of sewage waste make up one of the major factors in the spread of the disease."

Dr Olivieri went on to speak of crowded housing and inadequate health education: "These conditions which do not occur in the capital," he said, "are key factors in certain zones with a substantial increase in the number of cases, to the point that they do sometimes constitute regional epidemics."

The Disease Cycle

According to the epidemiological data accumulated, hepatitis has a stationary cycle, i.e., the highest incidence is in the winter and spring months. Incidence is low in preschool children and more prevalent in those of school age, between 6 and 12 (80 percent of the cases reported). "Because it is a disease for which there is no specific immunization, personal hygiene and environmental health are very important."

Prevention and Control

In conclusion, Dr Olivieri outlined the primary measures for the prevention and control of hepatitis, according to the information made public by the municipality on this subject.

The contact of the patient with presumably healthy persons should be restricted during the first week of the illness. The patient should be prevented for a month after the onset of the illness from visiting places where transmission is facilitated: schools, clubs, swimming pools, etc. The hands should be thoroughly washed, using soap, water and a brush, after each visit to the bathroom and before eating. The fingernails should be kept short and clean, and an individual towel should be used for drying. The patient should use separate glasses, forks and spoons and other utensils which touch the mouth. If there is any need to give injections, disposable syringes and needles should be used by preference to avoid the possibility of transmitting virus B hepatitis. If for any reason this is not possible, the equipment should be sterilized for use in a dry sterilization chamber or autoclave, or by being boiled in water for at least 30 minutes.

183 Patients This Year

In an epidemiological report issued by the municipal secretariat of public health, it was noted that there has been an increase between 1976 and this year in the number of cases of hepatitis reported, with the greatest number in 1979, due to the increased number of existing cases reported because of the transfer of the schools to the municipal jurisdiction.

According to the records kept since then, there were 493 cases in 1976, 305 in 1977, 467 in 1978, 814 in 1979, 931 in 1980, and 183 thus far this year, as compared to 131 for the same period last year.

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CSO: 5300/2130

BRIEFS

MEASLES EPIDEMIC--Measles has broken out in the city and its surroundings in an epidemic form. The number of patients reporting at the out patient departments of various city hospitals and the private practitioners has also marked sharp rise. [Excerpt] [Dacca THE BANGLADESH TIMES in English 20 May 81 pp 1,8]

CONJUNCTIVITIS EPIDEMIC--With a large number of patients attending the Out Patients Departments of various city hospitals and private practitioners in the city and its surroundings with eye complains, conjunctivitis appears to have broken out in an epidemic form. [Excerpt] [Dacca THE BANGLADESH TIMES in English 21 May 81 p 1]

CHOLERA DEATHS REPORTED--Dacca, May 6--At least 30 persons including four children died of cholera in the south and south western districts of Bangladesh, Press reports said here yesterday. The largest circulated Bengali daily ITTEFAQ said that of the deceased 26 had died in the coastal district of Barisal and the other four, all children, in the south western district of Jessore. The deaths have been confirmed by the districts Civil Surgeons (Medical Officers) and emergency preventive measures have been taken in the affected area, the paper said. [Text] [Karachi DAWN in English 5 May 81 p 14]

CSO: 5400

BRIEFS

TB CLAIMS LIVES--Tuberculosis (TB) is reported to have claimed the lives of many people in the Gantsi District and as a result in the Gantsi based medical officer Dr Jeanent Pedersen has called on the people to cooperate in an endeavour to have it eradicated. Dr Pedersen told BOPA that medical treatment alone may not cure this fatal disease. Better living conditions contribute a lot to its prevention. The medical officer said that malnutrition and anaemia were also prevalent in the Gantsi District and the majority of the patients visiting the health Centre suffered from these diseases. Dr Pedersen mentioned that most of the remote area dwellers who were now migrating to Gantsi in large numbers seem to be the most hard-hit. The Gantsi Based Remote Area Dwellers Officer, Mr Sentle, and Assistant Community Development Officer, Miss Dimpho Mosimakoko, admitted that there was an influx of job-seekers into Gantsi. [Text] [Gaborone DAILY NEWS in English 1 May 81 p 1]

CSO: 5400/5182

POLIO INCIDENCE ON RISE SINCE JANUARY 1981

Sao Paulo O ESTADO DE SAO PAULO in Portuguese 20 May 81 p 14

[Text] Poliomyelitis cases began to increase in the country again as of January, after remaining at a level regarded as low in December of last year, the minister of health, Waldyr Arcoverde, announced yesterday during his visit to Campo Grande for talks with Governor Pedro Pedrossian and the health secretaries of the state and municipality, Alberto Cubel and Antonio Pereira, respectively. His purpose was to inform them of the strategy being prepared for the mass campaign against infantile paralysis planned for children under five years of age on 13 June in all the municipalities in Mato Grosso do Sul.

The minister said that the federal government has already achieved success with its mass vaccination campaign against infantile paralysis, which will enter its third stage next month, with the application of the third dose throughout Brazil. The goal of the ministry of health for this year is to immunize 18 million children under five years of age. Waldyr Arcoverde stressed that one of the great concerns of the Joao Figueiredo government is the health of the Brazilian citizen, and that 1.4 billion cruzeiros have been spent on the purchase of vaccines to immunize the largest possible number of children.

Waldyr Arcoverde said further that the average number of infantile paralysis cases in the country between 1975 and 1979 came to about 2,500 cases per year, and that after the first dose of polio vaccine had been applied in June of last year, the average dropped substantially, as was later demonstrated, namely after the application of the second dose in August of that year. "In the second phase, the numbers dropped considerably, but we still have not reached the levels regarded as normal and we do not as yet have polio under control" Arcoverde said.

In his view, this decline is already a victory, mainly because the figure dropped to only eight cases in December. However, what has caused a certain degree of concern at the ministry of health has been the increase in cases noted beginning in January of this year. He said that it is believed that the figures will drop beginning in June as a result of the vaccination, mainly if the goal of the ministry, which is to immunize 80 percent of the Brazilian children under five years of age, is achieved.

Sao Paulo

There is no problem with the supply of polio vaccine in the state of Sao Paulo. The chief of staff at the health secretariat, Omar Sales de Lima, said yesterday that

a million doses were recently shipped to deal with routine vaccination and he believes that there will be no supply problems in connection with the national mass vaccination campaign scheduled for next month.

Currently, Omar explained, the health secretariat is making a survey of the needs for the two phases of the campaign, in order to inform the central medications facility of the number of doses which will be needed, the number of vaccination stations and the number of teams to be assigned to provide coverage for the entire state. The secretariat further hopes that the distribution of the doses will be based on the criterion of giving each station 50 percent more than the plan needs, to provide a reserve stock and guarantee that all the target population will be immunized.

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CBO: 5400/2133

BRIEFS

MINAS RABIES OUTBREAK--Belo Horizonte--About 250 animals, including cattle, horses and swine, died last month as a result of rabies transmitted by vampire bats in the municipality of Conceicao Aparecida, in the southern part of Minas, causing losses to 37 farmers totaling 4.6 million cruzeiros. A family of five was also attacked by bats and may have been infected. According to veterinarian Marcio Rodrigues Pereira, head of a team from the Minas Animal Health Institute, who was in the area, 231 bats regarded as potential rabies carriers were captured. Another outbreak of rabies in the municipality of Alterosa has already been brought under control. The veterinarian said that rabies is a disease which occurs throughout the state of Minas. In the past 12 years, 40 outbreaks have been reported in the Minas forest zone, apart from others in the southern part of Minas, the Minas triangle, the metallurgical zone and the municipalities of Guanhaes, Alvorada de Minas, Santa Rita de Jacutinga, Rio Preto and Pote. The institute is informing the ranchers of the need to vaccinate livestock, but that body does not supply the vaccine. The family which was attacked, named Balbino, in whose home four bats which will undergo laboratory examination were captured, has disappeared. The institute has warned the inhabitants of the region of the need to find the family so that they can be taken to a vaccination station. The extermination of the bats has already begun. An anticoagulant paste called diphenadione was applied to a small sampling of the animals captured. After returning to their colonies, they contaminate other bats thanks to their habit of licking each other. Death occurs instantaneously from internal hemorrhaging. The baited animals die two days later. [Text] [Rio de Janeiro JORNAL DO BRASIL in Portuguese 14 May 81 p 15] 5157

RABIES WORST IN RIO--Curitiba--Dr Enrique Mora, an advisor to the Panamerican Health Organization, said yesterday in this capital city that the largest number of rabies cases is to be found in the state of Rio de Janeiro, totaling 2,000 diagnoses in animals and 22 in humans in the past year. The state government is launching a rabies control campaign this year with the vaccination of dogs. "The lack of any campaign against rabies in Rio de Janeiro can even be explained by political reasons, since there are many bodies involved in the program and they do not always manage to work together," said Mora, who came to Curitiba for the inauguration of the regional Ministry of Agriculture laboratory. Enrique Mora believes that the known number of rabies cases in recent years in Brazil may possibly have increased because the system of reporting to health bodies has improved. In 1980, 141 cases of rabies in humans and between 4 and 5 thousand cases in animals were reported. [Text] [Rio de Janeiro O GLOBO in Portuguese 22 May 81 p 10] 5157

DISEASE CONTROL CAMPAIGN--Brasilia--The Superintendency for Public Health Campaigns (SUCAM) at the Ministry of Health has defined the priorities in the programs to combat major endemic diseases. This year, the areas to which the greater part of the resources totaling 5.5 billion cruzeiros for the total budget of the body are as follows: 1.7 billion cruzeiros for malaria, 500 million cruzeiros for yellow fever, and 934 million for Chagas' disease. The SUCAM superintendent, Jose Fiuza de Lima, said that there is an international commitment in the specific case of yellow fever to reduce the disease throughout the world. Chagas' disease has been a Ministry of Health concern because it has spread throughout the national territory, which is not the case with malaria, 95 percent of the cases of which are found in the Amazon region, as a result of the climatic conditions and the settlement projects. According to the most recent SUCAM surveys, there has been an increase in the incidence of malaria, in other regions of the country as well, especially as a result of the great migration flow. In Rio Grande do Sul, for example, 60 cases were reported just this year, all coming from the Amazon region, and the same thing happened in Sao Paulo, with more than 100 cases. But in Rondonia, regarded as the most endemic area in terms of the disease of malaria, the health body has succeeded in reducing the problem by introducing new methods of combating the disease. According to the SUCAM, the yellow fever program has been the focus of special attention, mainly in order to avoid the outbreak of an epidemic in its urban form. In this connection, the carrier mosquito, *aedes aegypti*, after having been eradicated, is being reintroduced along a considerable portion of the Brazilian coast, as well as other regions. The public health body cites a recent case in which an *aedes aegypti* specimen brought from the United States was found in Brasilia. [Text] [Sao Paulo O ESTADO DE SAO PAULO in Portuguese 20 May 81 p 14] 5157

CONJUNCTIVITIS IN RIO GRANDE DO NORTE--Natal--The appearance of five cases of conjunctivitis in the state has led the health secretariat of Rio Grande do Norte to take a series of steps to prevent the development of an outbreak of the disease. Health stations were established at the Augusto Severo airport in Natal, and at the highway police frontier posts on the federal roads leading to other states. Of the five cases reported, two occurred in Natal and three in Mossoro--276 km from the capital--and all the patients were persons who came from or had contact with travelers coming from Belem, where the epidemic began. In addition to the mobilization of its physicians in 150 municipalities in the state by the health secretariat, the Natal Ophthalmology Society is also participating in the campaign. Ophthalmologists are following the work at the health inspection stations, are drafting scientific reports for general practitioners, with details about the symptoms of conjunctivitis, and are advising the population. The most frequent recommendation of the doctors is not to purchase nonprescription eyewashes, because a minor run on the pharmacies in search of medications has already been seen. Medical authorities believe that the 33 ophthalmologists practicing in Natal will not suffice to care for the population if an epidemic of conjunctivitis were to occur. [Text] [Sao Paulo O ESTADO DE SAO PAULO 15 May 81 p 17] 5157

HEPATITIS IN ACRE--The health authorities in Acre are concerned about the increasing number of hepatitis reported throughout the state. In the capital alone, there were 177 cases between January and March of this year, and this illness figures among the 10 most common causes of death, according to a survey made by the biostatistical division of the public health department. The director of this department, Dr Armando Salvatierra, said yesterday that the situation is serious, and he expressed concern about the spread of the disease to the epidemic level. He said that unfortunately the basic sanitation conditions in the state justify this concern. The greater part

of the population is still consuming untreated well water and is not properly nourished. In addition to this, the hygiene habits desirable in a situation such as this are lacking. Apart from the danger of hepatitis, the population of Acre is currently threatened with malaria, of which many cases have been reported in the capital, and a very serious form of influenza which developed with the transition from the rainy season to the summer (dry) season. [Text] [Sao Paulo O ESTADO DE SAO PAULO in Portuguese 21 May 81 p 19] 5157

GLAUCOMA FACILITY PROVIDED--The secretariat of health and social advancement in Sao Bernardo do Campo, Sao Paulo, will open a Glaucoma Prevention Department on 1 June. It will provide free service to the residents of the municipality interested in checking interocular pressure. Glaucoma is a disease characterized by an increase in this pressure, normally in persons of over 20 years of age. If diagnosed too late, it can lead to irreversible blindness. [Text] [Sao Paulo O ESTADO DE SAO PAULO in Portuguese 21 May 81 p 19] 5157

POLIO VACCINE READY--The states in the north, center-west and northeast regions already have a guarantee of 14,640 doses of vaccine against poliomyelitis for the immunization of children under five years of age on 13 June, when the third stage of the national polio vaccination campaign will be carried out, Minister of Welfare and Social Security Jair Soares has announced in Brasilia. The states in the south-east and south regions will not receive their vaccine lots until the early days of June, "which should not hinder the campaign." [Text] [Sao Paulo O ESTADO DE SAO PAULO in Portuguese 21 May 81 p 19] 5157

INDIANS MEASLES VICTIMS--Manaus--The FUNAI [National Indian Foundation] yesterday confirmed an outbreak of measles, now in the residual stage, among the Vaimiri-Atroari Indians, who live along the Manaus-Caracaraí Highway (BR-174), which has caused the death of four Indians and two stillbirths. Representative Kazuto Kawamoto acknowledged the occurrence of the measles outbreak just as a statement was being released by the CIMI [Native Missionary Council] North 1 denouncing the practice of bacteriological warfare as a means of exterminating the Vaimiri-Atroari, in order to force the Indian group away from the land where the Balbino hydroelectric plant will be built. This charge was based on the hospitalization in Manaus of a Vaimiri-Atroari family since 12 May suffering from schistosomiasis, measles, pneumonia and tuberculosis. Captain Mami, one of the chiefs of the Vaimiri-Atroari, is among the Indian patients, according to the CIMI statement. At least three Indian children are reported to have contracted measles on being taken to Manaus in connection with Indian Week. [Text] [Rio de Janeiro O GLOBO in Portuguese 21 May 81 p 6] 5157

SCHISTOSOMIASIS OUTBREAK--Vitoria--In the Lagoa district (1,000 inhabitants) of Afonso Claudio, in the central part of Espirito Santo, 48 percent of the population is suffering from schistosomiasis, because the prefecture abandoned the regular treatment of the local water reservoir, allowing snails to reach the water tanks of residences. This report came from the regional director of the SUCAM [Superintendency for Public Health Campaigns], Jose Ayres de Alencar. "We were at fault," the prefect of Afonso Claudio, Leny Alves, said. He said that of the 10 water supply systems, only 2 are being treated. [Text] [Rio de Janeiro JORNAL DO BRASIL in Portuguese 6 May 81 p 9] 5157

MOSQUITO POPULATION INCREASING--Brasilia--Less than a month ago, an adult specimen of *Aedes aegypti*--the mosquito which carries yellow fever--was captured on board a Varig aircraft traveling from Miami with stops in Caracas and Manaus. This information was released by the SUCAM [Superintendency for Public Health Campaigns], who said the mosquito may have come from the Miami airport, where there is an enormous collection of useless tires "which serves as a center distributing the aedes to various countries, including Brazil, as has now been proven. "Brasilia is just one more city of the many in which the mosquito carrier of urban yellow fever has been found," according to a SUCAM survey. Just this year, two breeding centers for the mosquito which carries the yellow fever have been found, one in a rubber goods facility which had tires brought from El Salvador, in Propria, Sergipe, and another in Santos, Sao Paulo. There two centers were found, the first in a warehouse for used materials and a second in the port area, doubtless brought in via maritime transport. In Santos, another center was found last year, and according to the SUCAM technicians, the mosquitos were brought from Santa Cruz de La Sierra, in Bolivia, by railroad. A SUCAM technical survey showed that a center of mosquito breeding was found in April of last year in Recife, another in Aracaju and Tobias Barreto, in Sergipe, yet another in Belem do Para, and three others in Vila Sucuriu and Macapa, on the Amapa, and in Cabedelo, on the Paraiba. A number of breeding centers for the mosquito, which first were seen there in 1976, exist in Rio. [Text] [Sao Paulo O ESTADO DE SAO PAULO in Portuguese 16 May 81 p 14] 5157

CSO: 5400/2133

VACCINATION CAMPAIGN AIMED AT CHILDREN, PREGNANT WOMEN

Addis Ababa THE ETHIOPIAN HERALD in English 30 May 81 pp 1, 3

[Text] Addis Ababa (EH)--The vaccination programme against measles, pertussis, military tuberculosis, poliomyelitis, tetanus and diphtheria was launched in 1980 in about 80 towns throughout all the administrative regions of the country where 114 health units are actively participating in the campaign. Under the programme 250,000 eligibles have so far started getting vaccinations and partly completed the process.

This was stated by Comrade Estifanos Tekle, Head of Communicable Diseases Control Division in the Ministry of Health, in a recent interview. He said that the communicable diseases mentioned are a major health problem in the country and that they especially attack children. Because of this reality, certain control measures are necessary, he said. As a result, the programme of vaccination against the six childhood diseases was launched as of January 1980, he noted.

The objective of the programme is to make vaccination services available to all children to be born in Ethiopia by the year 1990. To attain this goal, he said ten per cent of the country's total population is expected to get these services annually. Thus, within ten years vaccination services will be available to the whole population and the services will continue. Once the service is thus established, every child will have the opportunity to get it, he added. The impact of this programme is to decrease morbidity, mortality and disability resulting from the diseases to a level that they are no longer a major public health concern, he explained.

Comrade Estifanos went on to say that in the vaccination programme priority is given to children below 24 months of age and pregnant women. This is because of the fact that children of this age group are more susceptible to the disease than those who are above that age and because of the nation's limited manpower and other resources, he pointed out.

He said that many lessons have been drawn from the programme launched in 1980. Better ways of vaccination and appropriate equipment suitable to the prevailing conditions have been identified. Moreover, efforts have been made to further identify shortcomings and constraints. "This will certainly help us to take measures accordingly and to be in a much better position in the rendering of our services," he stated.

"Seen in light of the complications involved while rendering our services," said Comrade Estifanos, "the results achieved are very encouraging. We have shortage of manpower, resources, management problems and problems of properly handling the vaccines especially in remote areas. We are trying to use better technology in order to overcome the problem of handling vaccines. It must be emphasized here that the active participation of the community is decisive in the proper implementation of our programme and the achievement of our final goals. Such participation should therefore continue with greater vigour."

As regards plans for 1981, the Division Head noted that following the adoption of resolutions by the Second Regular Plenary Meeting of COPWE Central Committee on the national vaccination programme, measures are in the process of being taken by the Ministry of Health towards further intensification of the programme. To this end, material preparations are being made and places are being identified for the expansion of services.

CSO: 5400/5179

BRIEFS

RURAL HEALTH SERVICES EXPANSION--Addis Ababa (EH)--The Ministry of Health plans to annually build two hospitals, 200 clinics and 20 health stations. Seen in the light of this plan, so far, the number of hospitals has in the past two years grown from 84 to 86 which means a growth by 2%. The number of health centres and clinics throughout the country has grown by 36% and 106% respectively. Disclosing this, in an interview yesterday, Comrade Getachew Abegaz, Head of Hospital Services Division in the Ministry of Health, said that emphasis is made on the provision of health services in the rural areas with population concentration. This emphasis has limited the growth of the number of hospitals and has given rise to the sprouting of health centres and clinics in various rural areas throughout the country. "Before the year 1968 E. C.", said the Division Head, "the total number of beds in hospitals was below 8,000. Today that number has grown to 10,203. Comrade Getachew went on to say that the number of doctors, nurses, technicians and other medical personnel have also increased. The Revolutionary Government has taken over some twenty privately-run hospitals. With reference to future plans, Comrade Getachew said that more manpower, budget and technology will be allocated to consolidate and further expand hospital services. [Excerpts] [Addis Ababa THE ETHIOPIAN HERALD in English 21 May 81 p 3]

CSO: 5400/5179

ENDEMIC DISEASES STATISTICS IN WOLEU-NTEM PROVINCE

Libreville L'UNION in French 6 May 81 p 7

[Article by Ismael Dalassé]

[Text] Dr Gilles Charles Bruno, the head of the northern region's center for endemic diseases, has served in our country for almost 3 years and is preparing to leave Gabon in a few months. He has outlined for our publication the principal problems which face the sanitation field.

Despite the problems encountered along the way, the complete coverage of the countryside in one year was facilitated by the dynamism and the team spirit of the nurses.

These are canvassing teams which track down the principal diseases by erecting on-site laboratory and treatment centers: the administration of extencillin, and the distribution of anti-parasitic drugs and synthesized quinine water. They clear the ground, thus, for the two remaining teams, one team for the control of leprosy and tuberculosis, and another team for an expanded vaccination program.

The vaccination program has 23 vaccination centers under its control across the Woleu-Ntem. Thanks to this program, village children under 5 are vaccinated for diphtheria, whooping cough, polio, tetanus, measles, and tuberculosis. This innovation allows encouraging results against measles to be obtained after 8 months.

In only 6 months the Expanded Vaccination Program (PEV) has succeeded in vaccinating 8,000 children. But many parents still refuse to have their children vaccinated; vaccinations, according to them, attracts rather than prevents illness. This negative attitude is costly for the many children who are not protected against such diseases as measles and whooping cough. In this perspective, sessions of public instruction are organized in villages to encourage parents to immunize their children.

The rural population's participation in medical examinations organized during the 1980 travels of sector 9 teams was a true record which allowed, by the way,

insight into the current situation of some of the Woleu-Ntem province's major diseases.

All together, this situation is not very bad. Nevertheless, we are constantly worried by the persistence of some diseases which, instead of diminishing, are spreading year after year, claiming new victims.

Considering leprosy, for example, one counts 750 patients in the province, 92 of whom are hospitalized in the Ebeign leprosarium which is 18 km south of Oyem. The principal centers are found in the l'Okana (Mitzic) and Sossolokom (Minvoul) regions. In the 5 years since 1975, the number of leprosy cases has decreased by 27 percent or 2000 individuals.

Conversely, tuberculosis remains a major preoccupation. From 1960 to 1965, 39 tuberculosis cases were spotted, and from 1965 to 1970, this number fell to 37 only to rise to 68 during 1975-1980. From 1975 to 1980, the number of leprosy cases rose to 309. This increase can be explained by the fact that during the 1960-1975 period, the disease track downs were not very thorough because road conditions and insufficient means of transportation impeded trips to all the villages. We can also infer that newly spotted cases were added to the non-reported cases in this period.

Nevertheless, the situation remains worrisome. Dr Gilles Bruno Charles, who has directed section 9 since 1976, believes "that it is necessary to continue the vaccination effort anti-tuberculin drugs and the systematic tracking down of diseased individuals, not only to cure them, but also so that they do not infect healthy people.

But the problem of housing tuberculosis patients comes into play because of the absence of hospital centers. Also, the SOACO center in Eyenassi (and not the SOACO foundation) has been assigned to the endemic disease department. Formerly a SOACO work site, the SOACO center has remained unoccupied since construction ended in 1978, and it will allow a 40 to 50 hospital bed capacity to be acquired very rapidly. This is, moreover, Dr Gilles Bruno Charles' desired solution.

9745

CSO: 5400/5163

GABON

STATISTICS SHOW PHYSICIAN'S PREFERENCE FOR CITIES

Libreville L'UNION in French 30 Apr-3 May 81 pp 1,4

[Article by Ngoyo Moussavou Bikoko]

[Text] More than half of Gabon's medical personnel work in Libreville. Such is the result of an inquiry that we have meticulously conducted for several months based on December 1980 statistics published by the Ministry of Public Health and Population.

Thus, one notes that 79 percent of Gabonese doctors practice in Libreville whereas the majority of doctors practicing in rural areas are foreigners. Now, nothing justifies this inequality when one considers that fewer patients need to be treated in Libreville than in the rural areas.

Although the capitol only has about 200,000 inhabitants, one out of every two physicians in Gabon work in Libreville. This rather surprising revelation takes place at a time when government officials are talking more and more about hospital centers and medical care for everyone by the year 2000, and demonstrates the physician's preference for the cities, to the detriment of the rural population.

According to the most recent statistics published by the Ministry of Public Health and Population, of the total 298 physicians in the country, 171 or 57.4 percent practice in the capitol. The country's remaining patients must be content with the services of 127 doctors.

This unequal repartition is also found among pharmacists, dentists, and paramedic squads. Thus, of Gabon's 36 pharmacists, 12 work in the rural areas and 24 work in Libreville, whereas only 9 of 24 dentists have located their practices in rural areas.

Even now medical and dental centers are being built in urban centers like Port-Gentil, Oyem, and Franceville. The rural areas totally lack facilities of this kind, apart from the dispensaries built by the Ministry of Health.

The other striking fact is that when one travels through the rural areas one is amazed by the small number of Gabonese physicians. There are, however, 91 at

the national level. The answer is simple: 72 of these physicians practice in the capitol, and prefer a more comfortable and rewarding lifestyle over unselfish social work. To such a point that most of the doctors heading rural hospitals are foreign physicians, although our own doctors possess the necessary qualifications for these positions. In Port-Gentil, for example, there are 3 Gabonese physicians as opposed to 18 foreign doctors.

Nevertheless, this inequality in the distribution of physicians between the city and the countryside is far from justified by the number of sick people throughout the country. In 1979, for example, of the two million patients treated by public hospitals, Libreville accounted for only 21,208 patients.

Will government officials reverse this trend and create more attractive conditions for Gabonese physicians in medically understaffed areas? This is something that we often forget to mention.

9745

CSO: 5400

BRIEFS

TYPHOID CASES--Some 400 cases of typhoid have been reported in El Milagro neighborhood in the past few weeks as a result of the serious water shortage. The Association for the Improvement of the Environment of El Milagro neighborhood has asked the chairman of the congress to intercede to have the municipal water enterprise be responsible for providing drinking water to El Milagro. At present water service is provided by the local municipality. [PA050406 Guatemala City Radio-Television Guatemala in Spanish 0400 GMT 2 Jun 81]

TYPHUS EPIDEMIC--The Guatemalan health authorities have reported a typhus epidemic in Quezaltenango. Health authorities said there is not enough vaccine and that only persons who have been in contact with persons who have the disease are being vaccinated. [PA052155 Guatemala City Emisoras Unidas de Guatemala in Spanish 1700 GMT 4 Jun 81]

CSO: 5400/2142

BRIEFS

VACCINATION CAMPAIGN--Comrade Policarpo Cabral de Almada, in charge of the hygiene and endemic disease services of the Quinara region has initiated a vaccination campaign against whooping cough, polio and measles in the entire region as of 16 May. The campaign began in the village of N'Djassane. [Excerpt] [Bissau NO PINTCHA in Portuguese 20 May 81 p 2]

CSO: 3400/5180

BRIEFS

GASTROENTERITIS FIGURES--Gastroenteritis is once again, moving its ugly face over Georgetown infants. Figures from the Hydration Department of the Georgetown Hospital, reveal that more than 2,300 children have been affected by gastro for this year. In January there were 574, February 421, March 712, April 500. For May the figures have exceeded 100 to date. The Hydration Unit, which started its monitoring last July, stated that during that month some 86 cases were recorded. In August it rose to 136, increased to 173 in September, decreased to 156 in October. Things began to improve with some 168 in November, then a big jump in December, to 325. In other parts of the country, the situation is less deplorable because, according to reports, parents have been taking more care with their children. In the rural areas, bush medicines are widely used. [Excerpt] [Georgetown SUNDAY CHRONICLE in English 17 May 81 p 13]

CSO: 3400

TUBERCULOSIS STUDY PROVIDES RATES OF INCIDENCE

Abidjan FRATERNITE MATIN in French 4 May 81 pp 22-23

[Excerpts] Last 9 March, Mrs Christine Adjobi Nebout gave a brilliant defense of her doctoral thesis in medicine. Her subject was a study of tuberculosis in children in our country, in connection with 256 cases observed at the CHU in Treichville over a period of five years.

Dr Adjobi Nebout's study, which covers a five-year period (1 January 1975 to 31 December 1979) focused on 256 patients between 4 months and 14 years of age. These observations reveal that the incidence of hospitalization for tubercular infants at the CHU in Treichville dropped from 1.4 percent to 0.6 percent between 1975 and 1979. In terms of distribution according to age, the author noted a clear preponderance of cases in those under 4 years of age (70 percent), with a very high incidence between 1 and 3 years of age (43.7 percent). As to distribution by sex, the proportions are substantially identical: 51.5 percent for males as compared to 48.5 percent for females. Distribution based on usual place of residence showed a very high rate of morbidity for the workers' neighborhoods. Out of the 256 cases observed, Koumassi accounted for 16.8 percent, Treichville 16.4 percent, and (Adjame) 13.7 percent. The plateau had but 0.4 percent, i.e., one case. Similarly, the socioprofessional category of the parents seemed to be a determining factor. In fact, 76.4 percent of the tubercular children hospitalized came from the most neglected social classes. "These children," Dr Adjobi Nebout wrote, "who are most frequently members of large families, live in unhealthy homes with a high level of intimacy and malnutrition."

Spectacular Development

The distribution of BCG vaccine and an analysis of birth circumstances revealed that 68.7 percent of the children born in maternity clinics were not vaccinated, while 94.7 percent of those born at home were not. The author stressed that "despite the efforts to systematize vaccination at birth, it is disheartening to note that this practice is still not generalized, and it is still more worrisome to note that this is true with births occurring in maternity clinics. Surveys made in the various clinics of the capital confirm this situation. In fact, for lack of accommodations, mothers take their infants home on an average of two hours after a normal birth, and do not consult the PMI except if the child becomes ill."

Moreover, the observations reveal that 43.7 percent of the tubercular children were infected by a close relative.

"The immediate clinical development," Dr Adjobi Nebout wrote, "given specific treatment, is generally spectacular, but patient treatment and follow-up after hospitalization is not easy." In fact, in the cases observed, there was no further contact with 67.2 percent of the patients and 11.7 percent died.

5157

C30: 5400/5157

SERIOUS SHORTAGE OF DOCTORS NOTED IN MAJ RELEASE

Kingston THE DAILY GLEANER in English 19 May 81 p 1

[Text] The Medical Association of Jamaica, said yesterday that the collapse of the country's medical services seemed imminent. It urged the government to accede to "the realistic proposals" made by the various categories of doctors.

In a release the MAJ stated that there were 110 vacancies existing in the service with fewer than 20 doctors doing their internship. Some 60 such posts are available in the government service. In recent years the release said the shortage of staff had become acute and "our Association foresees this situation becoming not only critical but desperate in the immediate future."

The MAJ attributes the "dwindling supply" of doctors to the inadequate remuneration received. The salaries of the doctors employed by both the government and University were low compared to that of other professionals in the society and to that of medical practitioners in other Caribbean territories, the Association stated.

The basic salaries of Consultant staff in the government service have remained unchanged for the last nine years and agreements made at a regrading exercise in 1978 have not been honoured, it said.

The low salaries paid to the junior doctors had made recruitment of medical graduates from the University very difficult, as well as forcing a number of them to resign from government service to go to other countries and into private practice.

"These continued resignations have placed an unbearable load on the shoulders of those few who have remained in the employ of the government," the release stated.

The Medical Association represents junior doctors and consultant staff at both the government and University hospitals. The government is about to embark on negotiations of salaries for the various categories of doctors.

"Our Association is strongly urging government to accede to the realistic proposals made by the various categories of doctors and to do so with extreme urgency as a collapse of the country's medical services seems imminent," the release stated.

[Editor's Note: The 25 May THE DAILY GLEANER, on page 1, reported that "'Additional medical personnel are being recruited to boost the health service staff and relieve the burden on those carrying the heavy load at this time,' Prime Minister Edward Seaga announced on Saturday night. The Prime Minister said that Health Minister Dr Kenneth Baugh had just returned from a recruitment mission to five countries and reported to him that he expected to have a degree of success in the recruitment of doctors, specialists and other personnel in the medical profession in the very near future."]

CSO: 5400

CHOLERA OUTBREAK UNDER CONTROL IN SARAWAK

Kuala Belait BORNEO BULLETIN in English 18 Apr 81 p 40

[Text]

KUCHING. — Serian and Kuching have both been declared cholera infected areas with the spread of the disease to the state capital at the beginning of this month.

But the state Medical Department says the disease is now under control with eight confirmed cases and 30 carriers being isolated, six of the carriers from the Kuching area.

The first case reported was of a 31-year-old woman from Tobedu, near

Serian, who was admitted to Serian District Hospital last month.

Five more cases, including one from Tobedu police barracks and a two-year-old baby, were reported from the Serian area.

Then at the beginning of this month two cases were reported in the Kuching area, one a Police Force member from the 18th Battalion at Kuching Airport and the other, thought to be connected, a nine-year-old girl from Mile 24,

Green Road, Matang.

The Medical Department has also warned that Kampung Jalan Aji-bah Abol and Kampung Samerah Padi in Kuching could both be cholera risk areas and has warned residents to be careful when cooking food and to make sure all drinking water is boiled before use.

Medical Department teams are in the areas to vaccinate residents and educate people about cholera and its symptoms.

CSO: 5400/8425

TREATMENT OF CARDIOVASCULAR DISEASES DISCUSSED

Casablanca AL-BAYAN in French 16 May 81 p 5

[Text] Last Saturday the legislative Assembly of the Casablanca prefectural committee met in Casablanca in conjunction with the National League Against Heart Disease. The league president, Mr Benaomar, granted an interview to MAP during which he defined the committee's immediate objectives, the financial support from which the League should benefit, and the future prospects of heart treatment and surgery at the national level.

Thus, concerning the dynamic role of the league's prefectural committee in Casablanca, Professor Benaomar estimated that he would first have to collect the necessary funds at the government level to bring aid to cardiac patients. He said the most objective and efficient way to help them is to first provide them with information, which requires elaborate means. In effect, the league president indicated that citizens were badly informed on the causes of cardio-vascular disease, and that knowledge can be a precious instrument of prevention. He said it is important that people know, for example, that a badly treated strep throat during infancy can degenerate into cardiac disease.

Professor Benaomar indicated that one of the other tasks that the prefectural committee will be able to implement, will be to try to improve currently existing equipment in the local cardiologic services and to equip them with some accessories, allowing accurate additional examinations so as to bring about equally precise diagnoses, and then to determine if open or closed-heart surgery should be performed on the patient in Rabat.

The league president also added that as the economic capitol, Casablanca has at its disposal numerous facilities, institutions, banks, and firms, and could come to the aid of the National League on the national budgetary level thanks to the prefectural committee, permitting it to confront the financial difficulties that it is currently facing in its struggle against cardio-vascular diseases.

In a question concerning the feasibility of operating, treating and caring for cardiac disease, even here in Morocco, Professor Benaomar estimated that cardiac disease among infants, from 14 to adulthood, can be treated medically as well as surgically on the national level. He stated consequently, that up until now, 150 open-heart surgeries were performed in Rabat, involving infant as well as adult patients with rheumatic or congenital heart diseases.

In a question involving the city of Casablanca, a metropolis of more than three million inhabitants which offers "interesting" living conditions which can lead to cardio-vascular diseases, Professor Benaomar indicated that the number of these diseases actually tended to increase throughout the country, "but Casablanca," he said, "with its industrial and commercial centers, its traffic, and at times its direct and indirect hostilities, is a city which encourages more than any other city, bodily injuries and particularly cardio-vascular diseases.

Thus, the urgent necessity to provide this city with all the necessary equipment.

0745

CSO: 5400/4739

MOZAMBIQUE

BRIEFS

CHOLERA STATISTICS--The last available data on cholera outbreaks in Caia and Mafambisse in the province of Sofala, dating from 12 and 13 May, show that from the middle of last week, no deaths have been registered. However, the incidence of cases has risen in both places. In Mafambisse, where 204 patients were hospitalized until the day before yesterday--with 92 confirmed cases of cholera--the number of hospitalizations until 7 May rose by 12. The number of deaths has not risen since that day, with 8 deaths in the hospital and 8 in private homes. Until 12 May, the number of cholera deaths in Caia was 3 in the hospital and 8 at home. However, the number of hospitalizations from 4 to 12 May rose from 26 to 60. Of these, 44 are confirmed cholera cases. [Text] [Beira NOTICIAS DA BEIRA in Portuguese 15 May 81 p 3]

CSO: 5400/5185

VENEREAL DISEASE INCIDENCE ON RISE IN MANAGUA

Managua BARRICADA in Spanish 11 May 81 p 5, 6

[Article by Pablo Emilio Barreto]

[Text] Syphilis and gonorrhea are two diseases that occur with great frequency in 57 neighborhoods of northeastern Managua. Many of the victims are children, states a report by the Francisco Buitrago Health Center.

The reports put out by that health center indicate that an average of 40 cases of each of these diseases are seen each month. "The saddest thing is that a good number of kids, the children of those suffering the diseases, have also been affected," said Ofelia Manfut and Melba de Ruiz, administrator and supervisor of the center, respectively.

Where Do the Patients Come From?

The majority of those suffering from syphilis and gonorrhea come from the barrios of the Costa del Lago of Managua, where sanitary conditions are still terrible. (Of course, this sector was among the most deprived during the Somoza tyranny, and it has never received medical care until now. This is also the first time anyone has made a great effort to improve the sanitary conditions there.)

Ofelia and Melba indicated that these patients have a difficult time "because it has become a vicious circle. Many of them do not follow the indications and instructions they are given, and they usually return to the health center with the same problem."

"We have explained to both men and women that they must keep their clothing and hands clean, and they must not have sexual relations as long as they are sick. . . Since they don't follow instructions, their children are then infected," they pointed out.

They said that people ill with these diseases come from other neighborhoods, but the majority of them come from the Barrio Las Torres, for example, which is on the edge of the lake.

They indicated that the children are probably infected by the adults' bed clot , or by using the same latrines their parents use for their physiological needs.

News Spreads Like Wildfire

We learned about the gonorrhea problem when we visited the Francisco Bultrago and Heroes and Martyrs of Nicaragua Health Centers, the latter located in Villa Venezuela.

The administrator of the latter health center, Comrade Roger Henriquez, reported that a curious development has been noted there. "Since the health center is in the middle of the neighborhood, whenever we unload shipments of medicine, the news spreads like wildfire, igniting the whole world. Right away a crowd of people shows up demanding medicine, inventing diseases. They even ask us for milk. We have explained to them that we give medicine only to those who are really sick, because it is in short supply and we can't be giving it out for whimsical or opportunist reasons," said Henriquez.

Care in These Centers

These two health centers have many limitations and enormous workloads, because the demand for health care has expanded since the triumph of the Revolution.

The Heroes and Martyrs of Nicaragua Health Center serves 21 barrios, from Villa Progreso to Sabana Grande and Camino del Rio. The latter barrio's residents named it Camino del Rio [River Road] because a road there was used to bring barrels of water to the river north of the airport.

According to Comrade Henriquez, this health center serves a population of 70,000 inhabitants. The two health centers provide the following services: comprehensive care for children and their mothers, preventive medicine, environmental hygiene, external care for adults, pediatric care, programs against contagious diseases, gynecology, injections, rehydration units (UROS), an anti-rabies program, social work, contact with the communities, etc.

Lines Begin at 0500 Hours

During our visit we noticed that the corridors were overflowing. We saw the most people at the Francisco Bultrago Health Center. Ofelia Manfut told us that the center treats 500 to 600 people a day, and that the building is too small to deal with so many people. She indicated that there is only one vehicle for mobile care.

Ofelia and Melba de Ruiz reported that they have a laboratory where tests are done for parasites and infectious diseases, along with blood tests. They indicated that there is a shortage of reagents, and that there are often problems keeping the electrical medical equipment in good repair "because of the heavy workload our comrades have at the Maintenance Shop of the Health Ministry." They said the same thing happens with office equipment and air conditioning units. "All this contributes to our limitations," stated Ofelia.

Medicinal Expenses, Only One Vehicle

At the two health centers vaccinations are given against polio, rabies, measles and tuberculosis. There is a permanent newborn care unit which includes special

programs in oral rehydration. There is also prenatal and postpartum care. Rabies is given special treatment there: If a dog bites someone, it is placed under observation to determine whether it has rabies. If it does, the bitten person is vaccinated against rabies.

Ofelia says that the work is intensive. Henriquez, to give an idea of the expenditures for medicine, stated that between January and April 1981 327,982.86 cordobas were spent on medicine in his health center alone.

During that same period, 136 cases of chicken pox, 30 of syphilis, 18 of tuberculosis and 244 of amebiasis were treated. Henriquez reported that there were also cases of gonorrhea, but to a lesser extent than at the Francisco Bultrago Health Center.

This health center has 84 workers, including 10 doctors. One of the physicians is the director, Roberto Macias Gomez. There are two Cuban internationalist doctors who provide invaluable assistance to the center.

Ofelia and Henriquez both indicated that in the summer the most frequent illnesses are respiratory, while during the rainy season the gastrointestinal diseases are more prevalent.

To sum up, they asserted that the human relations between the health care workers and the patients have grown and become stronger despite the great difficulties. Both maintained that the health centers seek to cooperate more closely with the mass organizations to solve the problems and persuade the people to take preventive measures so they won't become ill. "Our doctors claim that the main thing is not to give out a lot of medicine every day, but to educate the people so they will take preventive measures against contagious diseases." They said there are lectures about health care, and that patients are gathered together so they can be given instructions about how to improve their sanitary conditions.

8926

CSO: 5400/2138

NICARAGUA

BRIEFS

MENINGITIS CASES--A total of 73 meningitis cases has been reported in the past few days in the capital. According to health authorities, parents should not be alarmed, for this type of disease is neither mortal nor new in Nicaragua, where similar cases have been reported previously. Meningitis cases have reportedly increased with the arrival of the rainy season, but this is regarded as normal. No deaths have been reported among infants and in most cases patients are sent home after being treated. Once there, they recover satisfactorily without any type of sequel. [PA050406 Managua Radio Corporacion in Spanish 2300 GMT 3 Jun 81]

CSO: 5400/2142

BRIEFS

LASSA FEVER RESEARCH LABORATORY--The Federal Government plans to establish a maximum security laboratory in Ibadan for research and treatment of lassa fever and other viral diseases. A committee to see to the construction and other infra-structures relating to the laboratory has been set up. This was announced by Dr Oyewale Tomori, a researcher at the Virus Research Laboratory of the University Teaching Hospital, Ibadan. Dr Tomori said that the Virus Research Laboratory at his hospital should be fully equipped to serve as a back-up laboratory. He called for a reorientation of government attitude to research funding, which he said is virtually non-existent. He urged the establishment of isolation wards in all government hospitals in the country to cater for patients suffering from lassa fever and other viral diseases. [Text] [London WEST AFRICA in English 23 May 81 p 1197]

DISCRIMINATION AGAINST LEPERS--An appeal has been made to the public not to discriminate against certified treated lepers in the society. The appeal came from the Principal Health Superintendent in charge of the Uzuakoli Leprosy Settlement, Imo State, Mr Isaac Onoh. Mr Onoh stated that unless discharged and certified treated lepers were protected against discrimination and degradation in the society, they would continue to pose a serious challenge to the conscience of public spirited individuals and humanitarian organisations in the country. He advised the public to admit certified treated lepers in the society without discrimination and fear of contacting the disease. Mr Onoh explained that cases of deformity in treated leprosy patients were as a result of protracted cases. The principal health superintendent pointed out that because of the attitude of the society to treated lepers, there were 120 treated lepers at the Uzuakoli Leprosy Settlement. The principal health superintendent recalled the efforts and sacrifices of the Methodist Missionaries and expatriate doctors to keep the Uzuakoli settlement going. [Text] [Kaduna NEW NIGERIAN in English 19 May 81 p 16]

MEASLES OUTBREAK--Sixteen persons have died as a result of an outbreak of measles reported in five villages in Suleja Local Government area and in Federal Capital Territory, Abuja. Those who died were mostly children whose ages range from 3 months to twelve years at Ija-Gwarai, Lambatta, Tufa, Gwagwalada, and Izom. Medical officers and epidemiologists in Niger State and the Federal Capital Territory (FCT) have been assigned and deployed to contain the epidemic from spreading. The basic health officer in Suleja, Alhaji Ishaku Bisalla, who confirmed the deaths, explained that about 540 cases of measles were reported and treated within the Suleja area. The officer urged the people in the area to take more step

to improve the environmental sanitation of their premises and to report any outbreak of the disease to the nearest clinic. Suleja General Hospital and the Federal Capital Territory Hospital officials have expressed grave concern at the alarming outbreak of measles in the area. An official of the hospital told the NEW NIGERIAN how a housewife lost her two children within 48 hours of attack. [Text] [Kaduna NEW NIGERIAN in English 25 May 81 p 32]

SLEEPING SICKNESS WARNING--Lagos, 25 May (AFP)--A leading Nigerian health expert has warned of a possible sleeping sickness epidemic in this West African country, the news agency of Nigeria reported here. Dr Samuel Ochoga said that 19 cases of the disease had been reported to the Nigerian Institute for Trypanosomiasis Research in the past 6 weeks, including some from areas declared free of tse tse fly, the agency said. Dr Ochoga, head of the institute's epidemiological unit in the town of Kaduna, north central Nigeria, gave his warning while briefing visiting members of the House of Representatives Committee on Science and Technology last week, it added. [Text] [AB251215 Paris AFP in English 1145 GMT 25 May 81]

CSO: 5400/5176

PANAMA

BRIEFS

FLU EPIDEMIC--Panamanian health authorities say 150,000 cases of flu have been reported in the past few weeks. Dr Carlos Brandaris, acting deputy health minister, said the virus causing the flu is unknown despite investigations carried out by the Health Ministry and the Gorgas Laboratory. [PA052155 Panama City Televisora Nacional in Spanish 2315 GMT 1 Jun 81]

CSO: 3400/2142

SWAZILAND

BRIEFS

PM REPORTS CHOLERA DEATHS--Two people died from cholera at Sithobeleni in the bushveld last month. Ten more suspected to have contracted the disease are being treated at Sithobelweni Health Center. These latest cases were disclosed by the Prime Minister, Prince Mabandla when he addressed an Inkhundla meeting at Sandleni in the Shiselweni district at weekend. The two local people died about two weeks ago and this is the first cholera to be reported in the Shiselweni district. Prince Mabandla assured the meeting that government was very anxious to prevent the danger of cholera epidemic in the country. "Government has therefore taken measures, through the Ministry of Health, to prevent the spread of this deadly disease in Swaziland. "I therefore take this opportunity to appeal to you most strongly, and to urge you in the interest of national safety, to cooperate fully with the health officials working amongst you," stated the Prime Minister. He reminded his listeners that cholera was known to thrive in conditions where there are no proper toilet facilities and purified domestic water supply. He then urged all members of the community there and the entire nation never to drink river water without boiling it first and to take immediate steps to build suitable toilet facilities at their homesteads. "Everyone of you must make sure that every member of your family is vaccinated against cholera and that whenever you travel abroad, you go through the officially recognized border posts," he stated. It was not immediately established why the Ministry of Health decided not to report these cases as it did earlier when press statements were issued immediately after a case had been confirmed. [Text] [Mbabane THE TIMES OF SWAZILAND in English 2 Jun 81 p 1]

CSU: 5400/5177

TRINIDAD AND TOBAGO

BRIEFS

RUBELLA OUTBREAK--An outbreak of measles, including (Rubella), is raging in the country, and a Ministry of Health official yesterday described it as part of the two-year cycle which hits the country, mainly among young children. A small supply of vaccine, which the Ministry has been using in its inoculation programme, has run out and an order had been placed for a supply which is due shortly. The main area of concern is German measles which, if contracted by women in early pregnancy, can seriously damage the unborn infant, many of whom may be born blind or deaf and with other defects. According to Dr Roderick Dougdeen, Principal Medical Officer in charge of the Epidemiology Surveillance Department, every two years there is an outbreak of measles with an indication of a higher incidence in children. The Ministry, he said, has been aware of this and late last year and early this year issued public notices informing parents and pregnant women of the need to take the necessary inoculations. Dr Dougdeen has been working with the Caribbean Epidemiology Centre (Carec) in monitoring the situation. [Text] [Port-of-Spain SUNDAY GUARDIAN in English 24 May 81 p 1]

CSO: 5400

INTESTINAL DISEASES SAID TO INCREASE IN HO CHI MINH CITY

Ho Chi Minh City SAIGON GIAI PHONG 4 Mar 81 pp 1,4

[Article by "V.S.": "Pay All-Out Attention to Preventing and Fighting Intestinal Diseases"]

[Text] SGGP -- According to statistical data of the Disease Prevention-Sanitation Station, the number of people who have contracted such intestinal diseases as diarrhea and typhoid has increased in comparison to previous years. The city's hospitals must also treat a number of patients with cholera from the neighboring provinces.

The Municipal People's Committee has directed that the governmental administrations at the various levels, the organs, and the units must pay all-out attention to managing excrement, water, and garbage, and maintain maximum food sanitation. The committees guiding the prevention and fighting of epidemics in the precincts and districts must assign a number of specialized public health cadres in order to organize cooperation among many sectors with regard to propaganda, education, and the disposition of instances of deliberate violations of the common sanitation regulations. In March the precincts and districts must complete the first-cycle TAB inoculations, and go all-out to inoculate 90 to 100 percent of the people. The public health sector is preparing manpower, facilities, medicine, etc., in order to keep close tabs on the existing epidemic pockets and eliminate new ones that may appear.

The Real Estate and Public Works Management Service must assure the supplying of clean water for the people, especially in the working people's areas, in the villages in the outskirts, and in the most distant points served by the water distribution system. By all means, we must prevent garbage from piling up in the garbage pits, garbage barges, etc. In addition to the precincts and districts which have constructed and managed new public toilets in such key locations as precincts 1,3, and 5, Thu Duc, Nha Be, etc., the Public Security Service has urgently cooperated with the Public Health Service and the precincts and districts in punishing violators who do not maintain sanitation.

The Education Service and the Mothers and Children Protection Committee must have plans to teach sanitation, campaign for children not to eat snacks, etc.

The Municipal People's Committee requests that the chairmen of the people's committees at the various echelons and the heads of organs and units review their plans and immediately take steps to do a good job of carrying out the disease prevention and fighting tasks led by the public health sector.

5616

CSO: 9400/4598

BRIEFS

GREEN MONKEY DISEASE--Nairobi, 1 May--Sixty-seven Vervet monkeys that had been on their way to the Soviet Union were destroyed at a Nairobi animal shelter to avert a possible outbreak of dangerous viral disease, a Kenyan newspaper said today. They were among 202 monkeys that were stopped at the airport here on March 21 in transit from Ethiopia to Moscow via Amsterdam, the DAILY NATION reported. In addition to the monkeys, 100 baboons were destroyed at the shelter. The newspaper quoted the chairman of the Kenya Society for the Protection and Care of Animals, Ellis Monks, as saying the monkeys were retained in Nairobi because the import permit was not in order and the cages were only half the size required by international airline regulations. A few days after the animals were sent to the shelter, they began dying--in all, 135 perished. Mr Monks said that stress may have played a part in the death, but that the main cause was a virus disease allied to Marburg (green monkey) disease. "Further tests revealed that at least one of the monkeys gave a serological positive for Lassa's Disease," he added. Two cases of Marburg fever were discovered in Nairobi in February 1980, and one person died. Quick action was taken to avoid an epidemic of the disease, which killed about 400 people in Zaire and Sudan in 1976. --AFP [Text] [Paris AFRICA in English 5 May 81 p 25]

CSO: 5400/5183

MOZAMBIQUE

BRIEFS

CATTLE VACCINATION--During the period 21 to 29 April of this year, the Sofala livestock services vaccinated a total of 12,831 head of cattle in the Caia and Chemba districts. The campaign was aimed at prevention against hematic and symptomatic carbuncle, a disease rarely found in our country but nevertheless fatal. We have been informed that there is no problem in acquiring the needed vaccines, which are mostly produced in Maputo by the Veterinary Research Institute. Statistics for the entire province of Sofala are not available yet, but vaccinations have been carried out already in Dondo and Beira, which leaves the production areas of the Nhamatanda and Buzi districts to be covered later. Another program entails the vaccination of cattle by owners themselves against the tsetse fly, an insect afflicting the province of Sofala, especially in the Muda area, which has already proved fatal to some herds. [Excerpt] [Beira NOTICIAS DA BEIRA in Portuguese 4 May 81 p 3]

CSO: 5400/5185

NAMIBIA

BRIEFS

CATTLE LUNG DISEASE--Check points have been manned at border crossings between SWA and South Africa, the Director of the SWA Veterinary Department, Dr H Schneider said in Windhoek this week. The control measure has been introduced at the request of South African authorities to ensure that no cattle infected with lung disease crossed the border, Dr Schneider said. When the outbreak of the disease was first suspected some weeks ago, the export of cattle without veterinary permits was prohibited. "The check points will see to it that this regulation is strictly enforced," Dr Schneider said. Other containment measures which were announced since the first suspected outbreak in Damaraland at the beginning of the month are: The prohibition of all cattle movements out of Damaraland north of the Ugab river. The cancellation of all permits already issued where cattle had not already been loaded. Quarantine for a number of farms in and bordering Damaraland. [Text] [Windhoek THE WINDHOEK ADVERTISER in English 5 Jun 81 p 18]

CSO: 5400/5178

SALMONELLA OUTBREAK CAUSES HIGH SHEEP LOSSES

Wellington THE EVENING POST in English 15 May 81 p 3

[Text]

ASHBURTON, Today (PA). — Sheep farmers in the drought-stricken coastal area of mid-Canterbury have reported high stock losses after an outbreak of salmonella.

An Ashburton veterinarian, Dr G R Burr, said there were outbreaks of salmonella in mid-Canterbury every summer, but this year's incidence had been particularly high, due to the prolonged hot spell.

He said the only effective protection against salmonella was vaccination, but supplies of vaccine had been restricted this year. This was an added problem.

CSO: 5400

FACIAL ECZEMA REMAINS A MAJOR PROBLEM DISEASE

Auckland THE NEW ZEALAND HERALD in English 22 May 81 p 14

[Text] Twenty years after the pasture toxin causing facial eczema in sheep and cattle was identified and isolated, the disease remains a major, if periodic, problem.

With continual research at substantial cost, scientists at Ruakura Agriculture Research Centre and Wallaceville Animal Research Station have gathered more information.

Without it farmers would be worse off. But there is still, it seems, a long way to go.

Wallaceville scientists are still searching for a vaccine providing protection against liver damage in animals. They have yet to produce one.

Safer Pasture

And in a year when the disease has again caused severe damage in individual flocks and herds, the incidence has once more been shown to be bafflingly variable.

Some farmers with their own experience behind them prefer, it would seem, to take a chance rather than spend money and effort on control measures beyond shifting stock to a supposedly safer pasture.

And, judging by reports of some farmers' experiences, control measures, even when they are used, may not always be foolproof.

Despite counts of spores containing the toxin it all

adds up to eczema remaining a very tricky thing, which can strike on one farm and not on the neighbouring property, or even in one part of a paddock and not in another.

Most Effective

At the recent farmers' conference at Kaiwaka, Northland, a member of the Ruakura research team, Mr P. H. Mortimer, described as a "major breakthrough" the discovery many years ago that fungicides could be used to control the growth of spores.

"This method of control," he said, "is still the most effective where and when pasture can be sprayed. Unfortunately, not all farms have suitable topography to exploit this means and in other situations weather can delay the spraying until it is too late to be effective."

"Over the last six years attention has focused more and more on effective means of altering the state of the grazing animal so that it is less susceptible to the eczema toxin."

"If it is impractical to prevent the toxin being eaten, then we require stock which can better neutralise or otherwise eliminate the toxin from their systems."

Mr Mortimer outlined three specific avenues of research to find a means of preventing eczema — the search for a vaccine, dosing with various types of zinc and attempts to breed eczema-resistant sheep.

He said that with one type of antigen, Wallaceville scientists had conferred some protection in mice against the eczema toxin but they were unsuccessful with sheep.

Now they were testing another type of antigen.

Zinc Doses

In the earlier research with zinc it had been found that high dose rates were necessary to achieve protection. Those dose rates could produce toxicity and they would not be less costly than pasture spraying with fungicides.

The recent finding, however, that significant protection could be given by intermittent dosing of sheep with zinc oxide at three to six-day intervals made the zinc proposition more attractive and practicable.

"Further information is being sought on the use of zinc as a preventive agent," said Mr Mortimer. "But it is now considered that suf-

ficient information is available to release guidelines for its use as an emergency procedure where highly toxic pastures exist and where no alternative safe grazing is available."

At Ruakura resistant and susceptible flocks had been bred from the most resistant and susceptible rams.

Rapid Screening

These flocks were being used in studies on toxic metabolism in the hope of identifying a "biochemical marker" to aid in the field selection of resistant sires.

"Breeding for a significant degree of resistance to facial eczema is now clearly feasible," said Mr Mortimer, "and long-term prospects for control are better placed."

"However, for rapid progress in effecting selective breeding programmes some form of rapid laboratory screening for resistant traits is needed."

Mr Mortimer said that in addition to these three specific lines of research, Ruakura was exploring several other defence mechanisms which might be exploited to help the grazing animal safely to process and remove the facial eczema toxin from the vulnerable parts of its system.

CAMPAIGN TO REDUCE BRUCELLOSIS SHOWING RESULTS

Wellington THE EVENING POST in English 26 May 81 p 28

[Text]

A 10-year programme has succeeded at reducing the incidence of brucellosis and tuberculosis in New Zealand cattle to meet an EEC beef-access directive.

In 1974 more than 50,000 cattle reacted to brucellosis tests but by 1980 this number had fallen to 7728 and this year it is expected to drop further to about 5000.

With tuberculosis more than 15,000 cattle reacted to tests in 1979 and by 1980 the number was 4365. The number predicted for this year is about 3300.

The eradication campaign was carried out because of a requirement in the European Economic Community's directive which called for each meat processing plant to provide a separate slaughterhouse for sick or suspect animals.

"It was a very costly prerequisite," said the assistant director (administration) for the Ministry of Agriculture and Fisheries animal health division, Mr George Rogers, "and one where it was felt money would be better spent

in curing the cause rather than in attacking the symptom."

Rather than having industry funds going into the building of some separate slaughterhouses, the government decided in 1971 to mount a campaign to eradicate brucellosis from the national herd and to extend an existing tuberculosis eradication programme in dairy cattle to the beef herd.

The only problem left was what to do with the remaining diseased cattle, said Mr Rogers.

Traditionally, these animals would have joined New Zealand's manufactured beefmeat bound for the United States, but as they are now banned from export slaughterhouses this is no longer possible.

Not viable

As the domestic market prefers prime meat, it is not economically viable to process it for internal sale either.

It has therefore been decided to have the beasts slaughtered and buried or, where possible, boiled down.

BRIEFS

DOG EXTERMINATION CAMPAIGN--The Nicaraguan health authorities reported that some 400 dogs have been exterminated in Managua as part of the campaign to control a possible outbreak of rabies. Action is being taken against dogs wandering in the streets without owners. Health authorities said they expect to exterminate some 18,000 dogs in Managua. [PA052155 Managua Radio Corporacion in Spanish 2300 GMT 4 Jun 81]

CSO: 5400/2142

BRIEFS

LOSSES FROM ANIMAL DISEASES--The Head of the Department of Veterinary Medicine, University of Ibadan, Professor Oladipo Oduye, has said that Nigeria loses between 200 and 300 million Naira annually due to animal diseases. In an inaugural lecture titled "Veterinary Medicine and Nation Building" which he gave at the institution last Friday, Professor Oduye said that the trend could be reversed if the country was prepared to invest in animal disease investigation. He stated that the results of such an investigation, spread over a period of five years, would lead to a recovery of losses as well as increased animal production. Professor Oduye said that for an increase in the efficiency of animal disease investigation, veterinary investigation centres should be located in all parts of the country and should, for effectiveness, be about 150 to 160 kilometres apart. He said that it was grossly inadequate for Nigeria, with such a large size, to have two National Veterinary Research Institutes and only one of which was involved with disease investigation. "Nigeria," he declared, "can no longer afford this wasteful exercise, as the team will surely work better than in the present system where one group tries to pull apart the progress made by the other." [Text] [Kaduna NEW NIGERIAN in English 14 May 81 p 11]

CATTLE INOCULATIONS--The Wadil Local Government of Kano State inoculated 36,855 heads of cattle between January and December last year. According to the local government's head of agriculture and natural resources, Alhaji Muhtari Harbau, the cattle were inoculated against rinderpest and other diseases. He also said 3,539 cattle, 19,633 goats and 4,380 sheep were slaughtered for meat in various abattoirs in the area during the same period. The head of department revealed that veterinary clinics in the area treated 16,314 birds and 42,969 animals last year. He also said his department had established grazing fields at Lajawa, Achika and Darki in order to discourage the Fulanis from their unending search for pasture during the dry season. [Text] [Kaduna NEW NIGERIAN in English 19 May 81 p 15]

CSO: 5400/5181

MORE EFFICIENT DIP TANK SERVICE PLANNED

Salisbury THE HERALD in English 12 Jun 81 p 4

[Text] Bulawayo. Plans have been mapped out to introduce a more efficient dip tank service in the peasant cattle lands in Zimbabwe in a bid to check disease.

In July, the Department of Veterinary Services will take over the dips, the acting director, Dr J. W. Thomson, has announced.

"We hope to be able to provide an efficient service which will eventually return this country to the strict pre-war control situation," he said.

Hand in hand with the dipping will go a department vaccine campaign which, said Dr Thomson, would go beyond the boundaries of the former TTLs.

The response to vaccination so far has been mixed. In the eastern part of Victoria, veterinarians have experienced a 95 percent production rate of cattle for the protective jabs.

However down in southern Matabeleland, the production rate has been poor, between 50 percent and 60 percent. Dr Thomson admitted that they were "still having troubles" in that area.

Protection comes at a high price. Last year the country's vaccination bill amounted to more than \$1,000,000, much of it going in foreign currency to pay for drugs.

In addition to high costs, the veterinary department faces other pressures brought about by the shortage of experienced staff, which in time may be up through training in Zimbabwe.

Switzerland has supplied cash for a school in this country to train veterinary assistants, who will eventually form the backbone of a veterinary extension service in the former TTLs.

CSO: 5400/5184

FRUIT FLY ERADICATION CAMPAIGN UNDERTAKEN

Santiago LA NACION in Spanish 19 May 81 p 6A

[Text] A complete fumigation in the city of Los Andes will be done by the Agricultural and Livestock Service (SAG), which is a branch of the Ministry of Agriculture, because of the discovery of three specimens of the fruit fly that were caught last week and that, if they were to multiply, would cause serious damage in this fruit growing region.

SAG executive director Jaime de la Sotta, on revealing this information, said the discovery of the fruit flies endangers only 50 hectares, but for the safety of the growers chemical operations will be carried out on a 1,200 hectare surface because of the fly's reproductive capacity.

The measures for control, which include air and land fumigation with a toxic bait consisting of malathion and proteins, will be applied once a week starting this Wednesday, even though larva centers have not been discovered, nor any other traces of the fly that indicate its reproduction in the region.

In this regard, SAG is issuing an alert to all the fruit growers in the region to cooperate with the operations that will be carried out during this emergency.

De la Sotta said it is essential that an inspection of traps be made in all orchards, a statistical sampling of the fruit be arranged and no species of fruit be transported from the designated area to other areas.

Affected Fruit

De la Sotta said that so far losses cannot be discussed because this is a slowly developing problem for which a quick solution is being sought, and because fruit production for export is not affected, since it is kept in refrigerated chambers.

SAG experts said the fruit fly, *ceratitis capitata*, affects citric fruit such as tart and sweet oranges, avocado pears, persimmons, quinces, pears, figs, cherimoya fruit and others, which is why it is imperative to make the insect extinct in the region. Otherwise it will become a blight that can affect other regions of the country.

In the face of this situation SAG maintains a program of constant vigilance over regions Nos 1-8 to eliminate any possibilities of contagion. To achieve this goal SAG is depending on the cooperation of the citizens, the farmers and the squads of Chilean customs officers.

"Since the problem is incipient," said de la Sotta, "we hope that after two or three extinguishing operations the possibility of any larva center or adult fruit flies will be totally eliminated."

Tourists

Asked about the origin of the fruit fly in Chile, considering that in 1979 the problem was completely under control, de la Sotta said the fruit fly's appearance in Los Andes may result from the illegal transporting of foreign fruit to Chile.

In this regard, he said, SAG must maintain a state of total vigilance to seize fruits that travelers in transit smuggle over the border and later throw out in Chilean territory because the fruit has turned rotten.

"Generally, these fruits have the greatest chance of containing the larvae of insects that are destructive to agriculture," de la Sotta said.

Campaign

SAG will work vigorously on this problem for a 9-week period to generally prevent any larva centers.

This campaign was also carried out on the same date in 1979 and lasted several months. A total of \$500,000 was invested in the program's development, compared with the \$35 million that the loss of the fruit would have represented.

The fly, said de la Sotta, is caught through the use of traps that have a sexual attraction for the insects and are positioned at intervals of 1 hectare. The substance is called trimerclure and attracts the males in a radius of 10 to 300 meters.

With all of these sanitary measures, he said, we guarantee to our foreign buyers the quality of Chilean fruit. In the event that infected fruit is discovered, it will be seized and destroyed.

Chilean Cargo

Regarding cable information that revealed the rejection of Chilean apples in a European port because they were subjected to a disinfection process with a prohibited substance, de la Sotta said SAG did not have more background on this matter.

He added, finally, that SAG has jurisdiction only to certify that Chilean fruit shipments are free of blight and are subjected to the appropriate health inspections.

PHOTO CAPTIONS

1. p 6A. The fruit fly is one of the most destructive pests to fruit in the world and has a biological cycle of 6 days. Therefore, its extermination must be accomplished rapidly to prevent its spreading.
2. p 6A. "When a problem of this type arises, it is a matter of a national emergency effort, for which we ask everyone's support equally, said SAG executive director Jaime de la Sotta.

9545

CSO: 5400/2134

MYSTERIOUS ABNORMALITY AFFECTS RADIATA PINE FORESTS

Emergency Controls Invoked

Auckland THE NEW ZEALAND HERALD in English 26 May 81 p 1

[Text] The Government has invoked emergency control regulations to prevent the spread of a mystery abnormality discovered in pine forests in Northland.

The main area affected, about 20 hectares of radiata pine forest in Whakapara, about 25 kilometres north of Whangarei, has been declared a quarantine zone.

Public access is prohibited. Forest Service staff have to wear protective clothing, and vehicles are being cleaned after travelling through the area.

Forest Research Institute scientists are working to identify the abnormality and establish whether it is a disease or the result of spray damage or pollution.

The Minister of Forests, Mr Venn Young, said last night that New Zealand's investment in exotic forests was so high that the Forest Service was destroying the affected trees, on which the pine needles turn red and drop off.

Not Known

The 20 hectares are in the Puhupuhi State Forest. Also under quarantine are three wood lots on neighbouring farms and a small area of Glenbervie State Forest, only four miles north-east of Whangarei.

The scientist heading the team of forestry pathologists investigating the problem, Dr G. B. Sweet, told the

Herald last night it was not known if a disease was involved.

"It looks superficially as though spray damage or pollution has caused it but we have not been able to relate it to anything like that," he said.

"So our conclusion is that it is a disease of some sort.

"All our pathologists who have worked on it have tried to isolate what disease is present. The only fungi they can come up with are large numbers of fungi that are always present in litter breakdown.

"Our probable interpretation at the moment is that these fungi have misbehaved in the weather up North this summer and started to act pathogenically.

"In some parts of the world they have been known to do this and it is our opinion this is probably what is happening.

Dr Sweet said it had been a very wet and humid summer in the North this year and he suspected that was the cause.

Burn Trees

"However, there is a small possibility that it is not so, and it may be some disease we have not been able to isolate," he said.

"We rate the chance at one in one hundred that it is a new disease but forestry is a multi-billion dollar industry here.

"We think that even with that small chance it would be wise to burn the trees affected.

"We have some very good pathologists and if it is a new disease it is unknown anywhere in the world. If it is a disease, it is not anything we want," he said.

The conservator of forests in Auckland, Mr Gavin Molloy, said yesterday that the affliction was first noticed by a forest biology surveyor making a routine forest health inspection in March.

The quarantine has been in force since then, when it was suspected the cause was a flare-up of dothistroma, a fungus which spread through New Zealand pine forests in the 1980s.

Mr Molloy said dothistroma, which causes pine needles to brown and die off, was now accepted in New Zealand and was controlled by aerial spraying. However, the more rapid dying off of pine needles in the Whakapara area had led to the dothistroma theory being discounted.

Asked why the affliction had not been made public before now when it was being taken so seriously, Mr Molloy said the Forest Service had been waiting for identification of the cause and differentiation from dothistroma.

He also said the affected trees were in isolated areas.

"You could cause undue alarm in the absence of anything positive, and have to avoid pushing panic buttons.

"We have already let all private forest owners in the North know about the problem and what action we have taken."

Mr Molloy said there were no signs the abnormality was spreading at the moment, and affected areas would be burnt and an intensive spraying programme of the buffer zones would be carried out as soon as possible.

Mr Molloy said checks were being made with Australia to see if there was any pine tree disease of a similar nature there, following a theory that some "rusts" could drift across the Tasman.

Trees To Be Burned

Auckland THE NEW ZEALAND HERALD in English 27 May 81 p 1

[Text]

Whangarei

Twenty hectares of Puhipuhi State Forest and two hectares of privately owned trees will be cut down and burnt today to combat a mystery disorder threatening pine plantations.

The area which will be burnt by the Forest Service is at Whakapara, 25 kilometres north of Whangarei.

Another smaller stand of trees, near the Glenbervie State Forest headquarters, about 45 kilometres away, has also been affected by the disorder.

Emergency quarantine regulations have been declared in the northern and eastern areas of Whangarei county in an effort to isolate the problem.

The precautionary measure, which restricts pine stocks from being transported out of the area was invoked in March under the 1967 Forest Disease Control Regulations Act.

The quarantined area encompasses the northern and eastern sectors of Whangarei county from Whangaruru on the coast to State Highway 1 down to Kamo on the outskirts of Whangarei and east through Glenbervie to Ngunguru.

Photographed

Extensive aerial photography has been carried out in the area as well as in the Hokianga and Dargaville regions. But, at the moment, the outbreak appears to be confined to the Whakapara and Glenbervie areas.

The affected trees will be felled and burnt on the spot, depending on the weather.

Forest Service staff have already assessed the amount of affected timber in preparation for compensation claims.

Turn Red

The Conservator of Forests, Mr Gavin Molloy, of Auckland, arrived at Puhipuhi yesterday to inspect the area.

He said that tests so far had not been able to isolate anything pathogenic or fungicidal.

The effect of the disorder is that the pine needles first turn a reddish colour, then go brown and fall, leaving the trees bare.

A disease called dothistroma also results in needles being shed after they have turned brown. But older trees, such as the stand of 20-year-old pines at Puhipuhi, are considered to be immune to this.

Mr Molloy said that dothistroma, which had no effect on trees over 15 years old, could be controlled by aerial spraying.

The effects at Puhipuhi were at first thought to be caused by nearby gorse spraying. But the officer in charge of Glenbervie State Forest, Mr J. Norris, who first discovered the disorder in mid-March, noticed that it was spreading.

Routine

Mr Norris was carrying out a routine survey when he noticed the outbreak.

Samples were sent to the Forest Research Institute in Rotorua.

After inspecting the area yesterday, Mr Molloy said that some trees looked fair-

ly healthy, but others did not. Indicator plants which would have highlighted any chemical poison were unaffected.

"In this case, despite all the analytical work we have been unable to highlight any new pathogens in the area," he said. "We have been told that it is highly unlikely that it is a new or unknown disease."

High humidity and rainfall had provided ideal growing conditions for fungus, and this was a possibility.

"It is a real puzzler," Mr Molloy said, "an unknown which, on a minor off-chance, could be a real problem. That is why we are taking these precautions."

After the trees are burnt, a buffer spraying programme using copper and additives above the normal dosage for dothistroma, will be used to try to curb what is now officially known as "Puhipuhi needle cast."

NZ Forest Products, the country's largest private forest-owning company, was told last week of the disorder, the managing director, Mr D. O. Walker, said yesterday.

The company checked its forests in the north but found no sign of the disorder.

Aerial Spraying Planned

Auckland THE NEW ZEALAND HERALD in English 28 May 81 p 3

[Text]

Staff Reporter Whangarei

Forest Service workers yesterday began to cut down trees affected by disease at the Puhipuhi state forest.

The operation in the forest, which is 25 kilometres north of Whangarei, will continue for up to three days.

The burning-off of the contaminated trees was held up yesterday because of high winds.

Cutting down the trees is considered urgent because of the possibility of the disease spreading, as the infected

pine needles can be carried by the wind.

The next step in the fight to prevent an outbreak from contaminated areas at Puhipuhi and Glenbervie, 45 kilometres away, will be aerial spraying of the adjoining areas with copper-based chemicals.

Recovering some of the millable wood from the infected trees is also being investigated.

Scientists are still mystified about the nature of the disease, which is now called Puhipuhi needle cast.

Auckland 'HERALD' Comment

Auckland THE NEW ZEALAND HERALD in English 27 May 81 p 6

[Editorial: "Safety Vital to Forests"]

[Text]

Swift action by the Forest Service in isolating a small area of unhealthy pine trees near Whangarei underlines the growing importance of the forest industry to New Zealand. The planting of exotic forests did not begin in earnest until 1925 and the industry has burgeoned impressively since the Second World War.

Once described as "a rather unremarkable tree growing in a small area on America's west coast," radiata pine is now a significant earner of overseas exchange for New Zealand. Export receipts from forestry rose from nearly \$119 million in 1975 to \$496 million in 1980.

Nor, according to experts, has the industry by any means

reached its full potential. The world shortage of trees—some have suggested that the real energy crisis today is not oil but wood—holds a guarantee of lucrative markets for forest products in the future. It may be no exaggeration to predict that the area of New Zealand land planted in exotic forests could double in the next 20 years and that radiata pine could earn more than \$1000 million in overseas funds by the end of that period.

With so much at stake, the Government was wise to invoke emergency regulations to try to isolate the mysterious abnormality in the Northland forest. To have done less would have been irresponsible.

WHEAT FARMERS WARNED OF STRIPE RUST DANGER

Christchurch THE PRESS in English 22 May 81 p 15

[Text]

Farmers who sow Rongotea this season in the autumn in Canterbury or in the spring in Southland will need to be on their guard against new stripe rust, which made its appearance in Southland towards the end of last year and also in Canterbury later in the season.

From observations made so far in New Zealand Rongotea seems to be quite susceptible to the new rust.

This warning was given this week by Dr F. R. Sanderson, a plant pathologist at the Crop Research Division at Lincoln, and Mr P. D. Hadfield, seed production officer with the division.

It is expected that Rongotea could form as much as 50 to 60 per cent of the crop in Canterbury in the coming season and 40 per cent in Southland.

One of the problems is that as the disease did not appear in New Zealand last season until late in the year its effect on autumn sown wheat in the early stages is not known precisely.

Dr Sanderson said that the good results obtained in New Zealand with Rongotea were a reflection of results also obtained in Britain at the Plant Breeding Institute at Cambridge with the variety, and in that part of the world where stripe rust was widespread. Rongotea also appeared to be field resistant to the rust when assessed at the adult plant stage.

But where plants were introduced into a paddock at Otama near Gore where the rust was present late last year it was subsequently found on Rongotea seedlings indicating an early build-up on the variety. The variety appeared to be most susceptible and possibly more susceptible than Takahe, which has been widely grown in Southland.

In a spring-sown National List trial at Milton in Otago, after Tiritea, which has not yet been released for growing commercially, Rongotea was most susceptible to stripe rust followed by Takahe and Oroua.

However, Oroua which was in both trials, showed a high level of resistance and although assessed on four occasions at Otama and once at Milton did not show any trace of the rust.

In Southland Oroua could well be grown in the spring as it is similar in yield to Takahe and Kopara and only marginally behind Rongotea — the difference is so small that the extra yield that might be expected would not cover the cost of spraying, and as well there would be an advantage in that Oroua has a high baking quality.

The officers also suggested that Oroua should be considered for sowing in the spring in Canterbury in preference to Rongotea but where Rongotea is sown in the autumn a watch will need to be kept for stripe rust.

Dr Sanderson said that a lock out for the rust and also early mildew would have to be kept from about late September, and crops would have to be sprayed immediately the rust appeared on account of the rapid build-up that could occur. Yield losses of the order of 20 or 30 per cent might be experienced without spraying and two sprayings might have to be given in a season against stripe rust in an autumn-sown crop.

Spraying for early mildew in Rongotea and Hilgendorf was also justified but spraying later for mildew Dr Sanderson regards as being largely cosmetic.

Stripe rust manifests itself in the form of bright yellow stripes about 1 to 2 millimetres wide and 5 to 10 millimetres long with numerous bright yellow to orange or red raised pustules.

There is only really one chemical for the purpose — Bayleton — and it should be applied at 500 millilitres to the hectare.

However, Kopara and Hilgendorf have shown good field resistance to the rust.

In Southland where farmers grow Tiritea (if it is released) or Rongotea or Takahe they will also have to be prepared to spray at the first sign of the disease.

SCIENTISTS DEVELOP CONTROL FOR LEMON TREE BORER

Auckland THE NEW ZEALAND HERALD in English 26 May 81 p 3

[Text]

A biological control for lemon tree borer, the major insect problem in New Zealand home and commercial citrus orchards, is being developed by two Auckland scientists.

The system involves injecting borer tunnels in lemon, orange or grapefruit trees with a suspension containing microscopic nematodes, sometimes called eel-worms.

The nematodes invade the borer larvae, with deadly results.

Dr J. R. Clearwater and Dr W. M. Wouts, of the entomology division of the Department of Scientific and Industrial Research at Mt Albert, have achieved controls of better than 95 per cent of lemon tree borer larvae in field trials with the nematode.

By contrast, a trial in which the insecticide orthene was injected into the borer tunnels produced only a 50 per cent kill.

The scientists say a commercial nematode treatment may not be available for a year or two yet.

But the nematode so far used, *Neosaplectana feltiae*, is cheap to produce and the technique for using it requires less labour than present cultural methods of controlling lemon tree borer.

Unfortunately, the nematode employed does not migrate from one borer tunnel to another on a tree, meaning it would have to be applied annually by hand.

Dr Clearwater and Dr Wouts are now looking at another closely related nematode *Neosaplectana bibionis* which they hope may have the ability to migrate about a tree.

That would mean an orchardist should be able to simply spray a suspension containing the nematode on to his trees and then have long-term borer protection.

There is no evidence that the nematodes are harmful to mammals, but both are being stringently checked

for any unfortunate side effects, including whether they affect bees.

A nematode which could be sprayed on to a tree would be a marked advance for orchardists.

Insecticide sprays are ineffective because they do not reach the borer in the tunnels.

Citrus orchards generally use few agricultural chemicals, and nematodes could help maintain this status.

Dr Clearwater says most commercial citrus orchards have a density of one or two lemon tree borers a tree. Infestations rarely exceed five borers a tree.

At present infested wood

is removed, or the larvae are hooked out of their tunnels in major branches with fine wire.

Estimates of the cost of this method in commercial orchards range from 10c to 60c a borer.

The nematode, at the time it infects the borer, contains in its gut a special bacterium.

This bacterium starts multiplying rapidly as soon as body fluids of the borer are sucked up by the nematode.

These bacteria are then passed out in large numbers into the body cavity of the borer larva, decomposing its body fluids. The borer larva dies in about two days.

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